REMARKS

The Official Action of 21 March 2006 has been carefully considered and reconsideration of the application as amended is respectfully requested.

Applicants again affirm their election of claims 1-15 and 17-20, and request that withdrawn claim 16 be held in abeyance pending rejoinder upon the allowance of the product claim from which it depends.

The Abstract has been amended as requested by the Examiner.

The claims have been amended to remove the bases for the objections and rejections appearing at paragraphs 4 and 5 of the Official Action. New claim 24 has been added more completely to define the subject matter which Applicants regard as their invention. All claims as amended are respectfully believed to be sufficiently definite to satisfy the dictates of 35 USC 112, second paragraph.

Claims 1-5, 8-15 and 17-21 stand rejected under 35 USC 102(b) as allegedly being anticipated by Furuhashi et al or Nowlin et al. Claims 22 and 23 stand rejected under 35 USC 103(a) as allegedly being unpatentable over each of Furuhashi and Nowlin. Claims 6 and 7 stand rejected under 35 USC 103(a) as allegedly being unpatentable over Furuhashi et al or Nowlin et al in view of Job. Applicants respectfully traverse these rejections.

Independent claims 1 and 21 have been amended to restrict the claimed catalyst component to one that **consists of the reaction product of** an inorganic oxide support, and at least one alkyl metal compound, at least one halide, at least one dihydrocarbyl magnesium compound, at least one halide, at least one dihydrocarbyl magnesium compound, at least one difunctional compound that reacts with the dihydrocarbyl magnesium compound, and at least one titanium compound, which are supported on the support.

Furuhashi et al disclose a catalyst component which is prepared by contacting (1) a contact reaction product of (a) a metal oxide, (b) a dihydrocarbyl magnesium, and (c) a halogen-containing alcohol, with (d) an electron-donating compound and (e) a titanium compound. The catalyst component as claimed differs from that of Furuhashi et al, in that among other things, the claims exclude (d) an electron-donating compound, which is an essential component of the catalyst component according to Furuhashi et al.

In teaching the essential nature of the electron donating compound for the catalyst components described therein (see Furuhashi et al at, for example, column 2, lines 10-17), Furuhasi et al teach away from the claimed invention which excludes such compound. The exclusion of this compound thus not only renders the claims novel over the cited reference, it also renders the same nonobvious since there would have been no motivation, absent the hindsight provided by the present specification, to exclude this compound which the reference teaches to be essential to the operation of the catalyst component described therein. See MPEP 2143.01(VI) ("If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.").

On the basis of the disclosure of Furuhashi et al, in order to arrive at the claimed invention, those skilled in the art need: (1) to eliminate the component (d) an electron-donating compound, which is an essential component of the catalyst component according to Furuhashi et al, (2) to select an organic magnesium compound mixed or complexed with an organic compound of other metal, for example alkyl aluminum, and (3) to incorporate a halide as recited in the claimed invention into the catalyst component. Those skilled in the art would have had no motivation to do so. Moreover, there would not have been even a reasonable expectation that a catalyst component having good performance (as shown in the present specification) would be obtained.

The other cited primary reference, Nowlin et al, disclose a supported alpha-olefin polymerization catalyst composition, which is sythesized by reacting (1) a slurry of a solid catalyst carrier in a non-polar solvent with a dialkyl organomagnesium composition; (2) contacting the slurry of step (1) with a chlorinated alcohol; (3) contacting the slurry of step (2) with at least one transition metal compound; (4) removing the non-polar solvent to obtain a dry-flowing powder; and, (5) activating the powder with an activator (see, Nowlin et al at abstract, and col. 3, lines 44-68).

Nowlin et al refer to the powder obtained in step (4) as a "catalyst precursor," rather than a "catalyst component" as claimed. The catalyst precursor disclosed by Nowlin et al differs from the claimed catalyst component in that the catalyst precursor of Nowlin et al does not comprise (1) the alkyl metal compound of formula (1) of the claimed invention and (2) the claimed halide.

In the claimed invention, the claims require that the catalyst component be the reaction product of each and every one of the recited elements. Accordingly, if the halide is the same titanium compound used as the active center, for example $TiCl_4$, the preparation of the catalyst would require two steps of titanium compound treatment to form the claimed reaction product (see present specification at Example 3). This is *a fortiori* true with respect to process of preparation claims (see, e.g., claim 13). In contrast, Nowlin et al, do not show or suggest the addition of a separate halide. The activator as used by Nowlin et al, corresponds to (b) the organoaluminum compounds as recited in claim 15.

On the basis of the disclosure of Nowlin et al, in order to arrive at the claimed invention, those skilled in the art would need (1) to incorporate a halide as recited in the claimed invention into the catalyst component. However, in the absence of the hindsight provided by the present specification, there would have been no motivation to do so. Moreover, there would have been no expectation that a catalyst component having good performance would be obtained.

Accordingly, Applicants respectfully submit that the cited art cannot set forth even a **prima facie** case of obviousness for the invention as claimed and that the prior art rejections of record should be withdrawn (see MPEP Section 706.02(j)).

Applicants respectfully submit that all rejections and objections of record have been successfully traversed and that the application is now in allowable form. An early notice of allowance is earnestly solicited and is believed to be fully warranted.

Respectfully submitted,

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